

REMARKS

The above-captioned application along with the following remarks are being submitted as a full and complete response to the Office Action dated May 4, 2005. In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Status of the Claims

Claims 1-3 are under consideration in this application. Claim 1 is being amended, as set forth in the above marked-up presentation of the claim amendments, in order to more particularly define and distinctly claim Applicants' invention. Claims 2-3 are being added to recite other embodiment described in the specification.

Additional Amendments

The specification and the claims are being amended to correct formal errors and/or to better disclose or describe the features of the present invention as claimed. All the amendments to the specification and the claims are supported by the specification, especially the drawings. Applicants hereby submit that no new matter is being introduced into the application through the submission of this response.

Formality Rejection

Claim 1 was objected to for reciting "PET" and the Examiner has requested correction thereof. Claim 1 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. As claim 1 is being amended as required by the Examiner, the withdrawal of the above formal objection and rejection is in order, and is therefore respectfully solicited.

Prior Art Rejections

Claim 1 was rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent No. 5,518,046 to Furukawa et al. (hereinafter "Furukawa") in view of US Patent No. 5,628,957 to Collete et al. (hereinafter "Collete"). Eleven (11) other prior art references were cited as being pertinent to the disclosure. The above rejection has been carefully considered, but are most respectfully traversed.

The distribution system for PET (polyethylene terephthalate) bottles for drinking water or beverage in a process of an operation of manufacturing the PET bottle bodies to

disposal of the PET bottle bodies after the drinking water or beverage are drunken up of the invention (for example, the embodiment depicted in Fig. 1), as now recited in claim 1, comprises: (1) a step of forming a PET bottle body ([I] in Fig. 1; Fig. 6), in which a part or all of the PET bottle body except for vertical width of a mouth section of an upper end portion is in a bellows shape in a horizontal direction, into a predetermined volume and height; (2) a step of compressing the formed PET bottle body positioned in an inversed vertical state (p. 19, paragraph [0047], last line) in a vertical direction ([II], {III} in Fig. 1; Figs. 7-8), to be much smaller in volume than said predetermined volume and very low in height, and to keep in a compression state ([IV] in Fig. 1; Fig. 10) at a normal temperature; (3) a step of transporting the compressed PET bottle bodies to a charging factory of drinking water or beverage while keeping the compression state (top of [V] in Fig. 1); (4) a step of expanding the PET bottle body (bottom of [V] in Fig. 1) again to the volume and height during the forming step (1) when air is forced into the PET bottle body, or the PET bottle body is sterilized or cleaned, or during the charging step (3); and (5) a step of transporting the PET bottle bodies with the predetermined volume and height, which are charged with the drinking water or beverage, to wholesalers or retailers ([VII] in Fig. 1). When the PET bottle body charge with the drinking water or beverage is purchased and the drinking water or beverage is consumed, the volume and height of the PET bottle body can be reduced corresponding to the amount the bottle body is emptied, and after the drinking water or beverage is finished, the PET bottle body is compressed in a vertical direction by being crushed, so that the PET bottle can be discarded in a state with a much smaller volume than said predetermined volume and a very low height.

Claim 2 further recites that the forming step (1) involves inserting a preform (17) into a two-split die body (6) from below, heating the preform (17) uniformly, blowing high pressure air into the preform (17) to expand the preform (17) into the PET bottle body (1) (page 18, paragraphs [0044]-[0046]).

Claim 3 further recites that the PET bottle body (1) has a shoulder-section group of folds 5, 6, 7 and a body-section group of folds 8. The shoulder-section group of folds increase gradually in length away from the mouth section (3) as measured on a cross-sectional plane taken along a longitudinal axis of the PET bottle body (1), each shoulder-section fold has an inside periphery connected with an inside periphery of another shoulder-section fold and an outside periphery connected with an outside periphery of another shoulder-group fold further away from the mouth section (3). The body-section group of folds have an identical length as measured on the cross-sectional plane, a first body-section fold having an inside periphery

connected with an inside periphery of a last shoulder-section fold, each body-section fold is longer than each shoulder-section fold (page 15, paragraph 0036). The compressing step (2) involves compressing the PET bottle body by collapsing the shoulder-section group of folds 5, 6, 7 toward the mouth section 3, and collapsing the body-section group of folds 8 away from the mouth section 3 ([IV] in Fig. 1; Fig. 10; page 20, paragraph 0051).

Applicants respectfully contend that none of the cited references teaches or suggests (claim 1) a step of compressing the formed PET bottle body positioned in an inversed vertical state in a vertical direction, to be much smaller in volume than said predetermined volume and very low in height, and to keep in a compression state at a normal temperature; or (claim 2) inserting a preform 17 into a two-split die body 6 from below, heating the preform 17 uniformly, blowing high pressure air into the preform 17 to expand the preform 17 into the PET bottle body 1; or (claim 3) compressing the PET bottle body 1 by collapsing the shoulder-section group of folds 5, 6, 7 toward the mouth section 3, and collapsing the body-section group of folds 8 away from the mouth section 3 as the invention.

In contrast, Furukawa collapses the container 2 positioned in a vertical (rather than “inversed vertical”) state (Fig. 5; col. 5, lines 10-13; col. 6, lines 47-48). Furukawa only generally blow-molds the container 2 (col. 6, line 46), rather than inserting a preform 17 into a two-split die body 6 from below, heating the preform 17 uniformly, blowing high pressure air into the preform 17 to expand the preform 17 into the PET bottle body 1 as the invention. Furukawa collapses the container 2 by collapsing ALL folds toward the mouth section 3 (Fig. 5), rather than some toward the mouth section 3, and some away from the mouth section 3 as the invention.

None of the other references compensate for Furukawa’s deficiencies. For example, Collete injects resin 76 on to the core 46 from a side way (Fig. 4-6; col. 8, last two lines), rather than inserting a preform into a two-split die body 6 from below.

Applicants contend that none of the cited references discloses each and every feature of the present invention as recited in independent claim 1. As such, the present invention as now claimed is distinguishable and thereby allowable over the rejections raised in the Office Action. The withdrawal of the outstanding prior art rejections is in order, and is respectfully solicited.

Conclusion

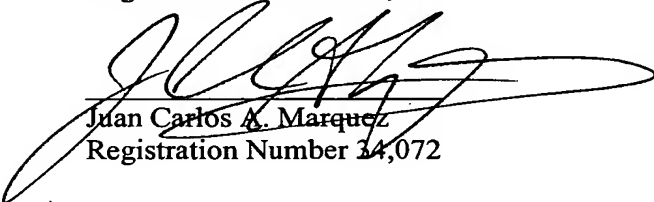
In view of all the above, clear and distinct differences as discussed exist between the

present invention as now claimed and the prior art reference upon which the rejections in the Office Action rely, Applicants respectfully contend that the prior art references cannot anticipate the present invention or render the present invention obvious. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicants' undersigned representative at the address and telephone number indicated below.

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